

WHAT IS CLAIMED IS:

1. A flex grip fixture clamp, comprising:
 - a progressive support clamp comprising:
 - a support member channel configured to receive a support member;
 - a semispherical recess; and
 - a handle;
 - a biscuit clamp comprising an accessory member channel configured to receive a component of an accessory; and
 - a ball joint comprising a ball selectively engageable with the semispherical recess, the ball joint interconnecting the progressive support clamp and the biscuit clamp,

wherein the progressive support clamp is actuatable from an open position to a support member clamp position, the support member clamp position precluding movement of the fixture clamp with respect to the support member clamp and allowing rotation of the ball, and wherein the progressive support clamp is further actuatable to a full clamp position, the full clamp position fixing the position of the ball.
2. The flex grip fixture clamp of Claim 1, wherein the ball joint is configured to provide omnidirectional positioning of the biscuit clamp.
3. The flex grip fixture clamp of Claim 2, wherein the ball joint has at least 180 degrees of motion in all directions.
4. The flex grip fixture clamp of Claim 1, wherein the ball joint has at least 180 degrees of motion in all directions.
5. The flex grip fixture clamp of Claim 1, wherein the ball joint further comprises a link member located between the ball and the biscuit clamp so that movement of the ball is transmitted through the link member to the biscuit clamp.

6. The flex grip fixture clamp of Claim 5, wherein the link member includes a first end that is coupled with the ball and a second end that is coupled with the biscuit clamp, the first end being smaller than the second end.

7. The flex grip fixture clamp of Claim 1, wherein the progressive support clamp includes a plurality of support member channels that enable the flex grip fixture clamp to be mounted on the support member in a plurality of orientations.

8. The flex grip fixture clamp of Claim 1, wherein the ball joint comprises a ring bearing having a curved wall of a radius matching that of the ball, the ring bearing being located on a hemisphere of the ball opposite to the location of the semispherical recess.

9. The flex grip fixture clamp of Claim 1, wherein the biscuit clamp further comprises a plurality of accessory member channels.

10. The flex grip fixture clamp of Claim 9, wherein at least two of the accessory member channels have different transverse cross-sectional sizes.

11. A method for positioning an accessory, the method comprising:

providing a flex grip fixture clamp comprising a progressive support clamp, an accessory clamp, and a ball joint that interconnects the progressive support clamp and the accessory clamp, the ball joint comprising a ball that is at least partially received by the progressive support clamp and a link member that extends to and is coupled with the accessory clamp;

coupling an accessory with the accessory clamp;

actuating the flex grip fixture clamp to an open position to enable the progressive support clamp to be coupled with a support member;

actuating the flex grip fixture clamp to a support member clamp position, to clamp the support member without clamping the ball joint; and

actuating the flex grip fixture clamp to a full clamp position, wherein the support member clamps the ball joint so that the position of the ball is fixed.

12. The method of Claim 11, wherein the accessory clamp is a biscuit clamp.

13. The method of Claim 12, wherein coupling the accessory with the biscuit clamp further comprises inserting a member connected to the accessory into a channel formed in the biscuit clamp.

14. The method of Claim 11, wherein the flex grip fixture clamp further comprises a support member channel, the method further comprising inserting a support member into the support member channel prior to actuating the flex grip fixture clamp from the open position to the support member clamp position.

15. The method of Claim 11, further comprising articulating the ball joint to position the accessory clamp.

16. The method of Claim 15, wherein articulating the ball joint comprises positioning the ball within the progressive support clamp.

17. A grip head, comprising:

a progressive support clamp having an elongate mounting arm, a ball joint portion, and an clamp actuating handle, the elongate mounting arm defining a first support member channel that extends along a central longitudinal axis of the elongate mounting arm, the ball joint portion defining a semispherical recess and a bearing recess positioned opposite the semispherical recess;

a biscuit clamp having a plurality of support member channels configured to receive support rods of different sizes from a photographic accessory; and

a ball joint comprising the semispherical recess, a ball contacting the semispherical recess, a bearing that is received by the bearing recess, and a link member extending between the ball and the biscuit clamp,

wherein the progressive support clamp is actuatable from an open position to a support member clamp position, the support member clamp position clamping a support member in the support member channel without clamping the ball, and wherever the progressive support clamp is further actuatable to a full clamp position, the full clamp position clamping the support member in the support member channel and also clamping the ball to fix the position of the ball.

18. The grip head of Claim 17, wherein the progressive support clamp further comprises a second support member channel defined in the elongate mounting arm aligned generally perpendicular to the first support member channel.

19. The grip head of Claim 17, wherein the progressive support clamp comprises a front housing having a front housing connecting bore, a back plate having a back plate connecting bore aligned with the front housing connecting bore, and a fastener configured to extend through at least one of the front housing connecting bore and the back plate connection bore to couple the front housing and the back plate together.

20. A flex grip fixture clamp, comprising:

a progressive clamp comprising:

a support member channel configured to receive a support member;

a semispherical recess; and

a handle having at least an open position, a support member clamp position and a full clamp position;

a biscuit clamp comprising an accessory member channel configured to receive a component of an accessory; and

a ball joint comprising a ball selectively engageable with the semispherical recess, the ball joint interconnecting the progressive clamp and the biscuit clamp, the progressive clamp responsive to the handle being in the open position to enable movement of the progressive clamp with respect to the support member and to enable movement of the ball with respect to the progressive clamp, the progressive clamp responsive to the handle being in the support member clamp position to inhibit movement of the progressive clamp with respect to the support member and to enable movement of the ball with respect to the progressive clamp, and the progressive clamp responsive to the handle being in the full clamp position to inhibit movement of the progressive clamp with respect to the support member and to inhibit movement of the ball with respect to the progressive clamp.